

Index to Volume 164

Alphabetical Table of Contents of Authors

- Agrawal, Anurag A. Plant Defense and Density Dependence in the Population Growth of Herbivores, 113
- Alonso-Alvarez, Carlos, Sophie Bertrand, Godefroy Devevey, Maria Gaillard, Josiane Prost, Bruno Faivre, and Gabriele Sorci. An Experimental Test of the Dose-Dependent Effect of Carotenoids and Immune Activation on Sexual Signals and Antioxidant Activity, 651
- Altizer, Sonia. See Nunn, Charles L., S90
- Amarasekare, Priyanga, Martha F. Hoopes, Nicolas Mouquet, and Marcel Holyoak. Mechanisms of Coexistence in Competitive Metacommunities, 310
- Anderson, T. Michael, Marc-André Lachance, and William T. Starmer. The Relationship of Phylogeny to Community Structure: The Cactus Yeast Community, 709
- Andrew, Nigel R. See Michael, Carolyn A., 1
- Angilletta, Michael J., Jr., Peter H. Niewiarowski, Arthur E. Dunham, Adam D. Leaché, and Warren P. Porter. Bergmann's Clines in Ectotherms: Illustrating a Life-History Perspective with Sceloporine Lizards, E168
- Arditi, Roger. See Tyutyunov, Yuri, 722
- Arguello, J. Roman. See Jones, Adam G., 444
- Armbruster, P. See McCleery, R. H., E62
- Arnold, Stevan J. See Jones, Adam G., 444
- Avilés, Leticia, Jeffrey A. Fletcher, and Asher D. Cutter. The Kin Composition of Social Groups: Trading Group Size for Degree of Altruism, 132
- Badyaev, Alexander. See Sæther, Bernt-Erik, 793
- Barfield, Michael. See Holt, Robert D., 187
- Barton, Robert A. See Nunn, Charles L., S90
- Becker, Peter H. See Sæther, Bernt-Erik, 793
- Berteaux, Dominique. See Klavana, Ilya, 283
- Bertram, Susan M. See Gorelick, Root, 677
- Bertrand, Sophie. See Alonso-Alvarez, Carlos, 651
- Bezy, Robert L. See Sinclair, Elizabeth A., 396
- Bjornstad, Ottar N. See Xia, Yingcun, 267
- Blair, L. See Webster, J. P., S33
- Bolles, Kathryn. See Sinclair, Elizabeth A., 396
- Brommer, Jon E. See Sæther, Bernt-Erik, 793
- Buchanan-Smith, H. M. See Osorio, D., 696
- Bukacinska, Monika. See Sæther, Bernt-Erik, 793
- Bukacinski, Dariusz. See Sæther, Bernt-Erik, 793
- Butler, Marguerite A., and Aaron A. King. Phylogenetic Comparative Analysis: A Modeling Approach for Adaptive Evolution, 683
- Cadet, Claire, Johan A. J. Metz, and Peter G. L. Klinkhamer. Size and the Not-So-Single Sex: Disentangling the Effects of Size and Budget on Sex Allocation in Hermaphrodites, 779
- Calabrese, Justin M., and William F. Fagan. Lost in Time, Lonely, and Single: Reproductive Asynchrony and the Allee Effect, 25
- Camarillo R., Jose L. See Sinclair, Elizabeth A., 396
- Cameron, Tom C. See Wearing, Helen J., 543
- Carrière, Yves. See Singer, Michael S., 423
- Caswell, Hal. See Hill, M. Forrest, E46
- Cazelles, Bernard. See Klavana, Ilya, 283
- Cervo, Rita, Valentina Macinai, Fabio Dechigi, and Stefano Turillazzi. Fast Growth of Immature Brood in a Social Parasite Wasp: A Convergent Evolution between Avian and Insect Cuckoos, 814
- Chesson, Peter. See Snyder, Robin E., 633
- Christensen, Hans. See Sæther, Bernt-Erik, 793
- Crandall, Keith A. See Sinclair, Elizabeth A., 396
- Cressman, Ross, Vlastimil Krivan, and József Garay. Ideal Free Distributions, Evolutionary Games, and Population Dynamics in Multiple-Species Environments, 473
- Cutter, Asher D. See Avilés, Leticia, 132
- Daly, Edoardo. See Porporato, Amilcare, 625
- Decaestecker, Ellen. See Ebert, Dieter, S19
- Dechigi, Fabio. See Cervo, Rita, 814
- Delhey, Kaspar. See Peters, Anne, 51
- Delibes, Miguel. See Revilla, Eloy, E130
- Delph, Lynda F. See Lively, Curtis M., S6
- de Mazancourt, Claire, and Ulf Dieckmann. Trade-Off Geometries and Frequency-Dependent Selection, 765
- Denk, Angelika G. See Peters, Anne, 51
- Devevey, Godefroy. See Alonso-Alvarez, Carlos, 651
- DeWitt, Thomas J. See Langerhans, R. Brian, 335
- Dickinson, Janis. See Sæther, Bernt-Erik, 793
- Dieckmann, Ulf. See de Mazancourt, Claire, 765
- Dobson, Andrew. Population Dynamics of Pathogens with Multiple Host Species, S64
- Donovan, Lisa A. See Gross, Briana L., 145
- Dubois, Frédérique, Luc-Alain Giraldeau, Ian M. Hamilton, James W. A. Grant, and Louis Lefebvre. Distraction Sneakers Decrease the Expected Level of Aggression within Groups: A Game-Theoretic Model, E32
- du Feu, Chris. See Sæther, Bernt-Erik, 793
- Dunham, Arthur E. See Angilletta, Michael J., Jr., E168
- Dybdahl, Mark F. See Lively, Curtis M., S6
- Ebert, Dieter, Hans Joachim Carius, Tom Little, and Ellen Decaestecker. The Evolution of Virulence When Parasites Cause Host Castration and Gigantism, S19
- Engen, Steinar. See Sæther, Bernt-Erik, 793
- Ernest, S. K. Morgan. See White, Ethan P., 670
- Fagan, William F. See Calabrese, Justin M., 25
- Faivre, Bruno. See Alonso-Alvarez, Carlos, 651
- Ferreras, Pablo. See Revilla, Eloy, E130
- Fewell, Jennifer H. See Gorelick, Root, 677
- Fiedler, Wolfgang. See Sæther, Bernt-Erik, 793
- Fletcher, Jeffrey A. See Avilés, Leticia, 132
- Fortelius, Mikael. See Jernvall, Jukka, 614
- Gaillard, Maria. See Alonso-Alvarez, Carlos, 651
- Gampe, Jutta. See Roach, Deborah A., 60
- Garant, Dany, Loeske E. B. Kruuk, Robin H. McCleery, and Ben C. Sheldon. Evolution in a Changing Environment: A Case Study with Great Tit Fledgling Mass, E115
- Garay, József. See Cressman, Ross, 473
- García-González, Francisco. Infertile Matings and Sperm Competition: The

- Effect of "Nonsperm Representation" on Intraspecific Variation in Sperm Precedence Patterns, 457
- Gardner, Andy, and Stuart A. West. Cooperation and Punishment, Especially in Humans, 753
- Gehlbach, Frederick R. See Sæther, Bernt-Erik, 793
- Ghalambor, Cameron K., David N. Reznick, and Jeffrey A. Walker. Constraints on Adaptive Evolution: The Functional Trade-Off between Reproduction and Fast-Start Swimming Performance in the Trinidadian Guppy (*Poecilia reticulata*), 38
- Gillings, Michael R. See Michael, Carolyn A., 1
- Giraldeau, Luc-Alain. See Dubois, Frédérique, E32
- Gittleman, John L. See Nunn, Charles L., S90
- Gomulkiewicz, Richard. See Holt, Robert D., 187
- Gorelick, Root, Susan M. Bertram, Peter R. Killeen, and Jennifer H. Fewell. Normalized Mutual Entropy in Biology: Quantifying Division of Labor, 677
- Gower, C. M. See Webster, J. P., S33
- Goymann, Wolfgang, Ignacio T. Moore, Alexander Scheuerlein, Katharina Hirschenhauser, Alan Grafen, and John C. Wingfield. Testosterone in Tropical Birds: Effects of Environmental and Social Factors, 327
- Grafen, Alan. See Goymann, Wolfgang, 327
- Grant, James W. A. See Dubois, Frédérique, E32
- Grenfell, Bryan T. See Xia, Yingcun, 267
- Gross, Briana L., Nolan C. Kane, Christian Lexer, Fulco Ludwig, David M. Rosenthal, Lisa A. Donovan, and Loren H. Rieseberg. Reconstructing the Origin of *Helianthus deserticola*: Survival and Selection on the Desert Floor, 145
- Gulick, Steve. See Sanz, Crickette, 567
- Hall, Spencer R. Stoichiometrically Explicit Competition between Grazers: Species Replacement, Coexistence, and Priority Effects along Resource Supply Gradients, 157
- Hamilton, Ian M. See Dubois, Frédérique, E32
- Hanski, Ilkka. See Ovaskainen, Otso, 364
- Hart, Adam G. See Wenseleers, Tom, E154
- Hartmann, Thomas. See Singer, Michael S., 423
- Harvell, C. Drew. See Kim, Kiho, S52
- Harvell, Drew. Ecology and Evolution of Host-Pathogen Interactions in Nature, S1
- Hasselquist, Dennis. See Owen-Ashley, Noah T., 490
- Heg, Dik. See Sæther, Bernt-Erik, 793
- Helms, Ken R. See Reuter, Max, E73
- Hill, M. Forrest, Jon D. Witman, and Hal Caswell. Markov Chain Analysis of Succession in a Rocky Subtidal Community, E46
- Hirschenhauser, Katharina. See Goymann, Wolfgang, 327
- Holen, Øistein Haugsten, and Rufus A. Johnstone. The Evolution of Mimicry under Constraints, 598
- Holley, Marita P. See Michael, Carolyn A., 1
- Holmes, Andrew J. See Michael, Carolyn A., 1
- Holt, Robert D., Michael Barfield, and Richard Gomulkiewicz. Temporal Variation Can Facilitate Niche Evolution in Harsh Sink Environments, 187
- Holyoak, Marcel. See Amarasekare, Priyanga, 310
- Hoopes, Martha F. See Amarasekare, Priyanga, 310
- Horvitz, Carol C. See Tuljapurkar, Shripad, 821
- Hosokawa, Azusa. See Yamauchi, Atsushi, 101
- Hötter, Hermann. See Sæther, Bernt-Erik, 793
- Hughes, Lesley. See Michael, Carolyn A., 1
- Jernvall, Jukka, and Mikael Fortelius. Maintenance of Trophic Structure in Fossil Mammal Communities: Site Occupancy and Taxon Resilience, 614
- Joachim Carius, Hans. See Ebert, Dieter, S19
- Johnstone, Rufus A. See Manica, Andrea, 517
- . See Holen, Øistein Haugsten, 598
- Jokela, Jukka. See Lively, Curtis M., S6
- Jones, Adam G., J. Roman Arguello, and Stevan J. Arnold. Molecular Parentage Analysis in Experimental Newt Populations: The Response of Mating System Measures to Variation in the Operational Sex Ratio, 444
- Jones, Kate E., and Ann M. MacLarnon. Affording Larger Brains: Testing Hypotheses of Mammalian Brain Evolution on Bats, E20
- Jones, Kate E. See Nunn, Charles L., S90
- Jonzén, Niclas, Chris Wilcox, and Hugh P. Possingham. Habitat Selection and Population Regulation in Temporally Fluctuating Environments, E103
- Jo Safran, Rebecca. Adaptive Site Selection Rules and Variation in Group Size of Barn Swallows: Individual Decisions Predict Population Patterns, 121
- Kane, Nolan C. See Gross, Briana L., 145
- Katti, Madhusudan. See Shochat, Eyal, 232
- Kauffman, Matthew J., Jacob F. Pollock, and Brian Walton. Spatial Structure, Dispersal, and Management of a Recovering Raptor Population, 582
- Kawecki, Tadeusz J. See Spichtig, Mathias, 70
- Kearney, Michael, and Richard Shine. Morphological and Physiological Correlates of Hybrid Parthenogenesis, 803
- Keller, Laurent. See Reuter, Max, E73
- Kempenaers, Bart. See Peters, Anne, 51
- Khokhlova, Irina S. See Krasnov, Boris R., 506
- Killeen, Peter R. See Gorelick, Root, 677
- Kim, Kiho, and C. Drew Harvell. The Rise and Fall of a Six-Year Coral-Fungal Epizootic, S52
- King, Aaron A. See Butler, Marguerite A., 683
- Klinkhamer, Peter G. L. See Cadet, Claire, 779
- Klvana, Ilya, Dominique Berteaux, and Bernard Cazelles. Porcupine Feeding Scars and Climatic Data Show Ecosystem Effects of the Solar Cycle, 283
- Koella, Jacob C. See Restif, Olivier, E90
- Krasnov, Boris R., Robert Poulin, Georgy I. Shenbrot, David Mouillot, and Irina S. Khokhlova. Ectoparasitic "Jacks-of-All-Trades": Relationship between Abundance and Host Specificity in Fleas (Siphonaptera) Parasitic on Small Mammals, 506
- Křivan, Vlastimil. See Cressman, Ross, 473
- Kruuk, Loeske E. B. See Garant, Dany, E115
- Lachance, Marc-André. See Anderson, T. Michael, 709
- Lambrechts, Marcel M. See Sæther, Bernt-Erik, 793
- Langerhans, R. Brian, and Thomas J. DeWitt. Shared and Unique Features of Evolutionary Diversification, 335
- Leaché, Adam D. See Angilletta, Michael J., Jr., E168
- Lefebvre, Louis. See Dubois, Frédérique, E32
- Lehmann, Laurent. See Reuter, Max, E73
- Lerman, Susannah B. See Shochat, Eyal, 232
- Levine, Jonathan M., and Mark Rees. Effects of Temporal Variability on Rare Plant Persistence in Annual Systems, 350
- Levitan, Don R. Density-Dependent Sexual Selection in External Fertilizers: Variances in Male and Female

- Fertilization Success along the Continuum from Sperm Limitation to Sexual Conflict in the Sea Urchin *Strongylocentrotus franciscanus*, 298
- Lewis, David B. See Shochat, Eyal, 232
- Lexer, Christian. See Gross, Briana L., 145
- Liow, Lee Hsiang. A Test of Simpson's "Rule of the Survival of the Relatively Unspecialized" Using Fossil Crinoids, 431
- Little, Tom. See Ebert, Dieter, S19
- Lively, Curtis M., Mark F. Dybdahl, Jukka Jokela, Erik E. Osnas, and Lynda F. Delph. Host Sex and Local Adaptation by Parasites in a Snail-Trematode Interaction, S6
- Lock, Judith E., Per T. Smiseth, and Allen J. Moore. Selection, Inheritance, and the Evolution of Parent-Offspring Interactions, 13
- Ludwig, Fulco. See Gross, Briana L., 145
- Macinai, Valentina. See Cervo, Rita, 814
- MacLarnon, Ann M. See Jones, Kate E., E20
- Manica, Andrea, and Rufus A. Johnstone. The Evolution of Paternal Care with Overlapping Broods, 517
- Matthysen, Erik. See Sæther, Bernt-Erik, 793
- McCann, Kevin S. See Teng, Jack, 85
- McClery, R. H., R. A. Pettifor, P. Armbruster, K. Meyer, B. C. Sheldon, and C. M. Perrins. Components of Variance Underlying Fitness in a Natural Population of the Great Tit *Parus major*, E62
- McClery, Robin H. See Garant, Dany, E115
- Merilä, Juha. See Sæther, Bernt-Erik, 793
- Metz, Johan A. J. See Cadet, Claire, 779
- Meyer, K. See McClery, R. H., E62
- Michael, Carolyn A., Michael R. Gillings, Andrew J. Holmes, Lesley Hughes, Nigel R. Andrew, Marita P. Holley, and H. W. Stokes. Mobile Gene Cassettes: A Fundamental Resource for Bacterial Evolution, 1
- Mitchell, Charles E. See Power, Alison G., S79
- Moore, Allen J. See Lock, Judith E., 13
- Moore, Ignacio T. See Goymann, Wolfgang, 327
- Morgan, Dave. See Sanz, Crickette, 567
- Mouillot, David. See Krasnov, Boris R., 506
- Mouquet, Nicolas. See Amarasekare, Priyanga, 310
- Nagata, Hiromi. See Yamauchi, Atsushi, 101
- Niewiarowski, Peter H. See Angilletta, Michael J., Jr., E168
- Numm, Charles L., Sonia Altizer, Wes Sechrest, Kate E. Jones, Robert A. Barton, and John L. Gittleman. Parasites and the Evolutionary Diversification of Primate Clades, S90
- Osnas, Erik E. See Lively, Curtis M., S6
- Osorio, D., A. C. Smith, M. Vorobyev, and H. M. Buchanan-Smith. Detection of Fruit and the Selection of Primate Visual Pigments for Color Vision, 696
- Ovaskainen, Otso, and Ilkka Hanski. From Individual Behavior to Metapopulation Dynamics: Unifying the Patchy Population and Classic Metapopulation Models, 364
- Owen-Ashley, Noah T., Dennis Hasselquist, and John C. Wingfield. Androgens and the Immunocompetence Handicap Hypothesis: Unraveling Direct and Indirect Pathways of Immunosuppression in Song Sparrows, 490
- Palomares, Francisco. See Revilla, Eloy, E130
- Pape Møller, Anders. See Sæther, Bernt-Erik, 793
- Pascarella, John B. See Tuljapurkar, Shripad, 821
- Pasinelli, Gilberto, Karin Schiegg, and Jeffrey R. Walters. Genetic and Environmental Influences on Natal Dispersal Distance in a Resident Bird Species, 660
- Perrins, C. M. See McClery, R. H., E62
- Peters, Anne, Kaspar Delhey, Angelika G. Denk, and Bart Kempenaers. Trade-Offs between Immune Investment and Sexual Signaling in Male Mallards, 51
- Pettifor, R. A. See McClery, R. H., E62
- Poe, Steven, and Marvalee H. Wake. Quantitative Tests of General Models for the Evolution of Development, 415
- Pollock, Jacob F. See Kauffman, Matthew J., 582
- Porporato, Amilcare, Edoardo Daly, and Ignacio Rodriguez-Iturbe. Soil Water Balance and Ecosystem Response to Climate Change, 625
- Porter, Warren P. See Angilletta, Michael J., Jr., E168
- Possingham, Hugh P. See Jonzén, Niclas, E103
- Poulin, Robert. See Krasnov, Boris R., 506
- Power, Alison G., and Charles E. Mitchell. Pathogen Spillover in Disease Epidemics, S79
- Price, Trevor D. See Yeh, Pamela J., 531
- Prost, Josiane. See Alonso-Alvarez, Carlos, 651
- Ratnieks, Francis L. W. See Wenseleers, Tom, E154
- Rees, Mark. See Levine, Jonathan M., 350
- Rendell, Wallace. See Sæther, Bernt-Erik, 793
- Restif, Olivier, and Jacob C. Koella. Concurrent Evolution of Resistance and Tolerance to Pathogens, E90
- Reuter, Max, Ken R. Helms, Laurent Lehmann, and Laurent Keller. Effects of Brood Manipulation Costs on Optimal Sex Allocation in Social Hymenoptera, E73
- Revilla, Eloy, Thorsten Wiegand, Francisco Palomares, Pablo Ferreras, and Miguel Delibes. Effects of Matrix Heterogeneity on Animal Dispersal: From Individual Behavior to Metapopulation-Level Parameters, E130
- Reznick, David N. See Ghalambor, Cameron K., 38
- Rieseberg, Loren H. See Gross, Briana L., 145
- Rissler, Leslie J., Henry M. Wilbur, and Douglas R. Taylor. The Influence of Ecology and Genetics on Behavioral Variation in Salamander Populations across the Eastern Continental Divide, 201
- Roach, Deborah A., and Jutta Gampe. Age-Specific Demography in *Plantago*: Uncovering Age-Dependent Mortality in a Natural Population, 60
- Robertson, Raleigh J. See Sæther, Bernt-Erik, 793
- Rodriguez-Iturbe, Ignacio. See Porporato, Amilcare, 625
- Rohani, Pejman. See Wearing, Helen J., 543
- Rolff, Jens, Frank Van de Meutter, and Robby Stoks. Time Constraints Decouple Age and Size at Maturity and Physiological Traits, 559
- Rosenthal, David M. See Gross, Briana L., 145
- Rousset, François. See Roze, Denis, 214
- Roy, B. A. See Stanton, M. L., 736
- Roze, Denis, and François Rousset. The Robustness of Hamilton's Rule with Inbreeding and Dominance: Kin Selection and Fixation Probabilities under Partial Sib Mating, 214
- Sæther, Bernt-Erik, Steinar Engen, Anders Pape Møller, Henri Weimerskirch, Marcel E. Visser, Wolfgang Fiedler, Erik Matthysen, Marcel M. Lambrechts, Alexander Badyaev, Peter H. Becker, Jon E. Brommer, Dariusz Bukacinski, Monika Bukacinska, Hans Christensen, Janis Dickinson, Chris du Feu, Frederick R. Gehlbach, Dik Heg, Hermann Höter, Juha Merilä, Jan Tottrup Nielsen, Wallace Rendell, Raleigh J. Robertson, David L. Thomson, János Török, and Piet

- Van Hecke. Life-History Variation Predicts the Effects of Demographic Stochasticity on Avian Population Dynamics, 793
- Sait, Steven M. See Wearing, Helen J., 543
- Sanz, Crickette, Dave Morgan, and Steve Gulick. New Insights into Chimpanzees, Tools, and Termites from the Congo Basin, 567
- Scheffer, Marten. See van Nes, Egbert H., 255
- Scheuerlein, Alexander. See Goymann, Wolfgang, 327
- Schiegg, Karin. See Pasinelli, Gilberto, 660
- Sechrest, Wes. See Nunn, Charles L., S90
- Senina, Inna. See Tyutyunov, Yuri, 722
- Sheldon, B. C. See McCleery, R. H., E62
- Sheldon, Ben C. See Garant, Dany, E115
- Shenbrot, Georgy I. See Krasnov, Boris R., 506
- Shimoda, Miyuki. See Yamauchi, Atsushi, 101
- Shine, Richard. See Kearney, Michael, 803
- Shochat, Eyal, Susannah B. Lerman, Madhusudan Katti, and David B. Lewis. Linking Optimal Foraging Behavior to Bird Community Structure in an Urban-Desert Landscape: Field Experiments with Artificial Food Patches, 232
- Shuster, Stephen M. See Wade, Michael J., E83
- Simmons, Adam D., and Chris D. Thomas. Changes in Dispersal during Species' Range Expansions, 378
- Sinclair, Elizabeth A., Robert L. Bezy, Kathryn Bolles, Jose L. Camarillo R., Keith A. Crandall, and Jack W. Sites, Jr. Testing Species Boundaries in an Ancient Species Complex with Deep Phylogeographic History: Genus *Xantusia* (Squamata: Xantusiidae), 396
- Singer, Michael S., Yves Carrière, Claudine Theuring, and Thomas Hartmann. Disentangling Food Quality from Resistance against Parasitoids: Diet Choice by a Generalist Caterpillar, 423
- Sites, Jack W., Jr. See Sinclair, Elizabeth A., 396
- Smiseth, Per T. See Lock, Judith E., 13
- Smith, A. C. See Osorio, D., 696
- Snyder, Robin E., and Peter Chesson. How the Spatial Scales of Dispersal, Competition, and Environmental Heterogeneity Interact to Affect Coexistence, 633
- Sorci, Gabriele. See Alonso-Alvarez, Carlos, 651
- Spichtig, Mathias, and Tadeusz J. Kawecki. The Maintenance (or Not) of Polygenic Variation by Soft Selection in Heterogeneous Environments, 70
- Stanton, M. L., D. A. Thiede, and B. A. Roy. Consequences of Intraspecific Competition and Environmental Variation for Selection in the Mustard *Sinapsis arvensis*: Contrasting Ecological and Evolutionary Perspectives, 736
- Starmer, William T. See Anderson, T. Michael, 709
- Stephens, Patrick R., and John J. Wiens. Convergence, Divergence, and Homogenization in the Ecological Structure of Emydid Turtle Communities: The Effects of Phylogeny and Dispersal, 244
- Stevens, Richard D. See Vázquez, Diego P., E1
- Stokes, H. W. See Michael, Carolyn A., 1
- Stoks, Robby. See Rolff, Jens, 559
- Taylor, Douglas R. See Rissler, Leslie J., 201
- Teng, Jack, and Kevin S. McCann. Dynamics of Compartmented and Reticulate Food Webs in Relation to Energetic Flows, 85
- Theuring, Claudine. See Singer, Michael S., 423
- Thibault, Katherine M. See White, Ethan P., 670
- Thiede, D. A. See Stanton, M. L., 736
- Thomas, Chris D. See Simmons, Adam D., 378
- Thomson, David L. See Sæther, Bernt-Erik, 793
- Török, János. See Sæther, Bernt-Erik, 793
- Tøttrup Nielsen, Jan. See Sæther, Bernt-Erik, 793
- Tuljapurkar, Shripad, Carol C. Horvitz, and John B. Pascarella. Correction, 821
- Turillazzi, Stefano. See Cervo, Rita, 814
- Tyutyunov, Yuri, Inna Senina, and Roger Arditi. Clustering due to Acceleration in the Response to Population Gradient: A Simple Self-Organization Model, 722
- Van de Meutter, Frank. See Rolff, Jens, 559
- van Doorn, G. Sander, and Franz J. Weissing. The Evolution of Female Preferences for Multiple Indicators of Quality, 173
- Van Hecke, Piet. See Sæther, Bernt-Erik, 793
- van Nes, Egbert H., and Marten Scheffer. Large Species Shifts Triggered by Small Forces, 255
- Vázquez, Diego P., and Richard D. Stevens. The Latitudinal Gradient in Niche Breadth: Concepts and Evidence, E1
- Visser, Marcel E. See Sæther, Bernt-Erik, 793
- Vorobyev, M. See Osorio, D., 696
- Wade, Michael J., and Stephen M. Shuster. Sexual Selection: Harem Size and the Variance in Male Reproductive Success, E83
- Wake, Marvilee H. See Poe, Steven, 415
- Walker, Jeffrey A. See Ghalambor, Cameron K., 38
- Walters, Jeffrey R. See Pasinelli, Gilberto, 660
- Walton, Brian. See Kauffman, Matthew J., 582
- Wearing, Helen J., Pejman Rohani, Tom C. Cameron, and Steven M. Sait. The Dynamical Consequences of Developmental Variability and Demographic Stochasticity for Host-Parasitoid Interactions, 543
- Webster, J. P., C. M. Gower, and L. Blair. Do Hosts and Parasites Coevolve? Empirical Support from the *Schistosoma* System, S33
- Weimerskirch, Henri. See Sæther, Bernt-Erik, 793
- Weissing, Franz J. See van Doorn, G. Sander, 173
- Wenseleers, Tom, Adam G. Hart, and Francis L. W. Ratnieks. When Resistance Is Useless: Policing and the Evolution of Reproductive Acquiescence in Insect Societies, E154
- West, Stuart A. See Gardner, Andy, 753
- White, Ethan P., S. K. Morgan Ernest, and Katherine M. Thibault. Trade-offs in Community Properties through Time in a Desert Rodent Community, 670
- Wiegand, Thorsten. See Revilla, Eloy, E130
- Wiens, John J. See Stephens, Patrick R., 244
- Wilbur, Henry M. See Rissler, Leslie J., 201
- Wilcox, Chris. See Jonzén, Niclas, E103
- Wingfield, John C. See Goymann, Wolfgang, 327
- . See Owen-Ashley, Noah T., 490
- Witman, Jon D. See Hill, M. Forrest, E46
- Xia, Yingcun, Ottar N. Bjørnstad, and Bryan T. Grenfell. Measles Metapopulation Dynamics: A Gravity Model for Epidemiological Coupling and Dynamics, 267
- Yamauchi, Atsushi, Azusa Hosokawa, Hiromi Nagata, and Miyuki Shimoda. Triploid Bridge and Role of Parthenogenesis in the Evolution of Autopolyploidy, 101
- Yeh, Pamela J., and Trevor D. Price. Adaptive Phenotypic Plasticity and the Successful Colonization of a Novel Environment, 531

Alphabetical Table of Contents of Titles

- Adaptive Phenotypic Plasticity and the Successful Colonization of a Novel Environment. Pamela J. Yeh and Trevor D. Price, 531.
- Adaptive Site Selection Rules and Variation in Group Size of Barn Swallows: Individual Decisions Predict Population Patterns. Rebecca Jo Safran, 121.
- Affording Larger Brains: Testing Hypotheses of Mammalian Brain Evolution on Bats. Kate E. Jones and Ann M. MacLarnon, E20.
- Age-Specific Demography in *Plantago*: Uncovering Age-Dependent Mortality in a Natural Population. Deborah A. Roach and Jutta Gampe, 60.
- Androgens and the Immunocompetence Handicap Hypothesis: Unraveling Direct and Indirect Pathways of Immunosuppression in Song Sparrows. Noah T. Owen-Ashley, Dennis Hasselquist, and John C. Wingfield, 490.
- Bergmann's Clines in Ectotherms: Illustrating a Life-History Perspective with Sceloporine Lizards. Michael J. Angilletta, Jr., Peter H. Niewiarowski, Arthur E. Dunham, Adam D. Leaché, and Warren P. Porter, E168.
- Changes in Dispersal during Species' Range Expansions. Adam D. Simmons and Chris D. Thomas, 378.
- Clustering due to Acceleration in the Response to Population Gradient: A Simple Self-Organization Model. Yuri Tyutyunov, Inna Senina, and Roger Arditi, 722.
- Components of Variance Underlying Fitness in a Natural Population of the Great Tit *Parus major*. R. H. McCleery, R. A. Pettifor, P. Armbruster, K. Meyer, B. C. Sheldon, and C. M. Perrins, E62.
- Concurrent Evolution of Resistance and Tolerance to Pathogens. Olivier Restif and Jacob C. Koella, E90.
- Consequences of Intraspecific Competition and Environmental Variation for Selection in the Mustard *Sinapis arvensis*: Contrasting Ecological and Evolutionary Perspectives. M. L. Stanton, D. A. Thiede, and B. A. Roy, 736.
- Constraints on Adaptive Evolution: The Functional Trade-Off between Reproduction and Fast-Start Swimming Performance in the Trinidadian Guppy (*Poecilia reticulata*). Cameron K. Ghalambor, David N. Reznick, and Jeffrey A. Walker, 38.
- Convergence, Divergence, and Homogenization in the Ecological Structure of Emydid Turtle Communities: The Effects of Phylogeny and Dispersal. Patrick R. Stephens and John J. Wiens, 244.
- Cooperation and Punishment, Especially in Humans. Andy Gardner and Stuart A. West, 753.
- Correction. Shripad Tuljapurkar, Carol C. Horvitz, and John B. Pascarella, 821.
- Density-Dependent Sexual Selection in External Fertilizers: Variances in Male and Female Fertilization Success along the Continuum from Sperm Limitation to Sexual Conflict in the Sea Urchin *Strongylocentrotus franciscanus*. Don R. Levitan, 298.
- Detection of Fruit and the Selection of Primate Visual Pigments for Color Vision. D. Osorio, A. C. Smith, M. Vorobyev, and H. M. Buchanan-Smith, 696.
- Disentangling Food Quality from Resistance against Parasitoids: Diet Choice by a Generalist Caterpillar. Michael S. Singer, Yves Carrière, Claudine Theuring, and Thomas Hartmann, 423.
- Distraction Sneakers Decrease the Expected Level of Aggression within Groups: A Game-Theoretic Model. Frédérique Dubois, Luc-Alain Giraldeau, Ian M. Hamilton, James W. A. Grant, and Louis Lefebvre, E32.
- Do Hosts and Parasites Coevolve? Empirical Support from the *Schistosoma* System. J. P. Webster, C. M. Gower, and L. Blair, S33.
- The Dynamical Consequences of Developmental Variability and Demographic Stochasticity for Host-Parasitoid Interactions. Helen J. Wearing, Pejman Rohani, Tom C. Cameron, and Steven M. Sait, 543.
- Dynamics of Compartmented and Reticulate Food Webs in Relation to Energetic Flows. Jack Teng and Kevin S. McCann, 85.
- Ecology and Evolution of Host-Pathogen Interactions in Nature. Drew Harvell, S1.
- Ectoparasitic "Jacks-of-All-Trades": Relationship between Abundance and Host Specificity in Fleas (Siphonaptera) Parasitic on Small Mammals. Boris R. Krasnov, Robert Poulin, Georgy I. Shenbrot, David Mouillot, and Irina S. Khokhlova, 506.
- Effects of Brood Manipulation Costs on Optimal Sex Allocation in Social Hymenoptera. Max Reuter, Ken R. Helms, Laurent Lehmann, and Laurent Keller, E73.
- Effects of Matrix Heterogeneity on Animal Dispersal: From Individual Behavior to Metapopulation-Level Parameters. Eloy Revilla, Thorsten Wiegand, Francisco Palomares, Pablo Ferreras, and Miguel Delibes, E130.
- Effects of Temporal Variability on Rare Plant Persistence in Annual Systems. Jonathan M. Levine and Mark Rees, 350.
- Evolution in a Changing Environment: A Case Study with Great Tit Fledgling Mass. Dany Garant, Loeske E. B. Kruuk, Robin H. McCleery, and Ben C. Sheldon, E115.
- The Evolution of Female Preferences for Multiple Indicators of Quality. G. Sander van Doorn and Franz J. Weissing, 173.
- The Evolution of Mimicry under Constraints. Øistein Haugsten Holen and Rufus A. Johnstone, 598.
- The Evolution of Paternal Care with Overlapping Broods. Andrea Manica and Rufus A. Johnstone, 517.
- The Evolution of Virulence When Parasites Cause Host Castration and Gigantism. Dieter Ebert, Hans Joachim Carius, Tom Little, and Ellen Decaestecker, S19.
- An Experimental Test of the Dose-Dependent Effect of Carotenoids and Immune Activation on Sexual Signals and Antioxidant Activity. Carlos Alonso-Alvarez, Sophie Bertrand, Godefroy Devevey, Maria Gaillard, Josiane Prost, Bruno Faivre, and Gabriele Sorci, 651.
- Fast Growth of Immature Brood in a Social Parasite Wasp: A Convergent Evolution between Avian and Insect Cuckoos. Rita Cervo, Valentina Macinai, Fabio Dechigi, and Stefano Turillazzi, 814.
- From Individual Behavior to Metapopulation Dynamics: Unifying the Patchy Population and Classic Metapopulation Models. Otso

- Ovaskainen and Ilkka Hanski, 364.
- Genetic and Environmental Influences on Natal Dispersal Distance in a Resident Bird Species. Gilberto Pasinelli, Karin Schiegg, and Jeffrey R. Walters, 660.
- Habitat Selection and Population Regulation in Temporally Fluctuating Environments. Niclas Jonzén, Chris Wilcox, and Hugh P. Possingham, E103.
- Host Sex and Local Adaptation by Parasites in a Snail-Trematode Interaction. Curtis M. Lively, Mark F. Dybdahl, Jukka Jokela, Erik E. Osnas, and Lynda F. Delph, S6.
- How the Spatial Scales of Dispersal, Competition, and Environmental Heterogeneity Interact to Affect Coexistence. Robin E. Snyder and Peter Chesson, 633.
- Ideal Free Distributions, Evolutionary Games, and Population Dynamics in Multiple-Species Environments. Ross Cressman, Vlastimil Krivan, and József Garay, 473.
- Infertile Matings and Sperm Competition: The Effect of "Nonperm Representation" on Intraspecific Variation in Sperm Precedence Patterns. Francisco García-González, 457.
- The Influence of Ecology and Genetics on Behavioral Variation in Salamander Populations across the Eastern Continental Divide. Leslie J. Rissler, Henry M. Wilbur, and Douglas R. Taylor, 201.
- The Kin Composition of Social Groups: Trading Group Size for Degree of Altruism. Leticia Avilés, Jeffrey A. Fletcher, and Asher D. Cutter, 132.
- Large Species Shifts Triggered by Small Forces. Egbert H. van Nes and Marten Scheffer, 255.
- The Latitudinal Gradient in Niche Breadth: Concepts and Evidence. Diego P. Vázquez and Richard D. Stevens, E1.
- Life-History Variation Predicts the Effects of Demographic Stochasticity on Avian Population Dynamics. Bernt-Erik Sæther, Steinar Engen, Anders Pape Møller, Henri Weimerskirch, Marcel E. Visser, Wolfgang Fiedler, Erik Matthysen, Marcel M. Lambrechts, Alexander Badyaev, Peter H. Becker, Jon E. Brommer, Dariusz Bukacinski, Monika Bukacinska, Hans Christensen, Janis Dickinson, Chris du Feu, Frederick R. Gehlbach, Dik Heg, Hermann Hötter, Juha Merilä, Jan Tøttrup Nielsen, Wallace Rendell, Raleigh J. Robertson, David L. Thomson, János Török, and Piet Van Hecke, 793.
- Linking Optimal Foraging Behavior to Bird Community Structure in an Urban-Desert Landscape: Field Experiments with Artificial Food Patches. Eyal Shochat, Susannah B. Lerman, Madhusudan Katti, and David B. Lewis, 232.
- Lost in Time, Lonely, and Single: Reproductive Asynchrony and the Allee Effect. Justin M. Calabrese and William F. Fagan, 25.
- Maintenance of Trophic Structure in Fossil Mammal Communities: Site Occupancy and Taxon Resilience. Jukka Jernvall and Mikael Fortelius, 614.
- The Maintenance (or Not) of Polygenic Variation by Soft Selection in Heterogeneous Environments. Mathias Spichtig and Tadeusz J. Kawecki, 70.
- Markov Chain Analysis of Succession in a Rocky Subtidal Community. M. Forrest Hill, Jon D. Witman, and Hal Caswell, E46.
- Measles Metapopulation Dynamics: A Gravity Model for Epidemiological Coupling and Dynamics. Yingcun Xia, Ottar N. Bjørnstad, and Bryan T. Grenfell, 267.
- Mechanisms of Coexistence in Competitive Metacommunities. Priyanga Amarasekare, Martha F. Hoopes, Nicolas Mouquet, and Marcel Holyoak, 310.
- Mobile Gene Cassettes: A Fundamental Resource for Bacterial Evolution. Carolyn A. Michael, Michael R. Gillings, Andrew J. Holmes, Lesley Hughes, Nigel R. Andrew, Marita P. Holley, and H. W. Stokes, 1.
- Molecular Parentage Analysis in Experimental Newt Populations: The Response of Mating System Measures to Variation in the Operational Sex Ratio. Adam G. Jones, J. Roman Arguello, and Stevan J. Arnold, 444.
- Morphological and Physiological Correlates of Hybrid Parthenogenesis. Michael Kearney and Richard Shine, 803.
- New Insights into Chimpanzees, Tools, and Termites from the Congo Basin. Crickette Sanz, Dave Morgan, and Steve Gulick, 567.
- Normalized Mutual Entropy in Biology: Quantifying Division of Labor. Root Gorelick, Susan M. Bertram, Peter R. Killeen, and Jennifer H. Fewell, 677.
- Parasites and the Evolutionary Diversification of Primate Clades. Charles L. Nunn, Sonia Altizer, Wes Sechrest, Kate E. Jones, Robert A. Barton, and John L. Gittleman, S90.
- Pathogen Spillover in Disease Epidemics. Alison G. Power and Charles E. Mitchell, S79.
- Phylogenetic Comparative Analysis: A Modeling Approach for Adaptive Evolution. Marguerite A. Butler and Aaron A. King, 683.
- Plant Defense and Density Dependence in the Population Growth of Herbivores. Anurag A. Agrawal, 113.
- Population Dynamics of Pathogens with Multiple Host Species. Andrew Dobson, S64.
- Porcupine Feeding Scars and Climatic Data Show Ecosystem Effects of the Solar Cycle. Ilya Klvana, Dominique Berteaux, and Bernard Cazelles, 283.
- Quantitative Tests of General Models for the Evolution of Development. Steven Poe and Marvalee H. Wake, 415.
- Reconstructing the Origin of *Helianthus deserticola*: Survival and Selection on the Desert Floor. Briana L. Gross, Nolan C. Kane, Christian Lexer, Fulco Ludwig, David M. Rosenthal, Lisa A. Donovan, and Loren H. Rieseberg, 145.
- The Relationship of Phylogeny to Community Structure: The Cactus Yeast Community. T. Michael Anderson, Marc-André Lachance, and William T. Starmer, 709.
- The Rise and Fall of a Six-Year Coral-Fungal Epizootic. Kiho Kim and C. Drew Harvell, S52.
- The Robustness of Hamilton's Rule with Inbreeding and Dominance: Kin Selection and Fixation Probabilities under Partial Sib Mating. Denis Roze and François Rousset, 214.
- Selection, Inheritance, and the Evolution of Parent-Offspring Interactions. Judith E. Lock, Per T. Smiseth, and Allen J. Moore, 13.
- Sexual Selection: Harem Size and the Variance in Male Reproductive Success. Michael J. Wade and Stephen M. Shuster, E83.
- Shared and Unique Features of Evolutionary Diversification. R. Brian Langerhans and Thomas J. DeWitt, 335.

- Size and the Not-So-Single Sex:
Disentangling the Effects of Size and Budget on Sex Allocation in Hermaphrodites. Claire Cadet, Johan A. J. Metz, and Peter G. L. Klinkhamer, 779.
- Soil Water Balance and Ecosystem Response to Climate Change. Amilcare Porporato, Edoardo Daly, and Ignacio Rodriguez-Iturbe, 625.
- Spatial Structure, Dispersal, and Management of a Recovering Raptor Population. Matthew J. Kauffman, Jacob F. Pollock, and Brian Walton, 582.
- Stoichiometrically Explicit Competition between Grazers: Species Replacement, Coexistence, and Priority Effects along Resource Supply Gradients. Spencer R. Hall, 157.
- Temporal Variation Can Facilitate Niche Evolution in Harsh Sink Environments. Robert D. Holt, Michael Barfield, and Richard Gomulkiewicz, 187.
- A Test of Simpson's "Rule of the Survival of the Relatively Unspecialized" Using Fossil Crinoids. Lee Hsiang Liow, 431.
- Testing Species Boundaries in an Ancient Species Complex with Deep Phylogeographic History: Genus *Xantusia* (Squamata: Xantusiidae). Elizabeth A. Sinclair, Robert L. Bezy, Kathryn Bolles, Jose L. Camarillo R., Keith A. Crandall, and Jack W. Sites, Jr., 396.
- Testosterone in Tropical Birds: Effects of Environmental and Social Factors. Wolfgang Goymann, Ignacio T. Moore, Alexander Scheuerlein, Katharina Hirschenhauser, Alan Grafen, and John C. Wingfield, 327.
- Time Constraints Decouple Age and Size at Maturity and Physiological Traits. Jens Rolff, Frank Van de Meutter, and Robby Stoks, 559.
- Trade-Off Geometries and Frequency-Dependent Selection. Claire de Mazancourt and Ulf Dieckmann, 765.
- Trade-Offs between Immune Investment and Sexual Signaling in Male Mallards. Anne Peters, Kaspar Delhey, Angelika G. Denk, and Bart Kempenaers, 51.
- Trade-offs in Community Properties through Time in a Desert Rodent Community. Ethan P. White, S. K. Morgan Ernest, and Katherine M. Thibault, 670.
- Triploid Bridge and Role of Parthenogenesis in the Evolution of Autopolyploidy. Atsushi Yamauchi, Azusa Hosokawa, Hiromi Nagata, and Miyuki Shimoda, 101.
- When Resistance Is Useless: Policing and the Evolution of Reproductive Acquiescence in Insect Societies. Tom Wenseleers, Adam G. Hart, and Francis L. W. Ratnieks, E154.

Alphabetical Table of Keywords

- abundance, 506, 670
acquiescence, E154
adaptation, 38, 145, 683
adaptive dynamics, 765
adaptive foraging, 473
additive genetic variance, E62, E115
age-dependent mortality, 60
aggression, E32
aggressive mimicry, 598
alternative stable states, 255
altitude, 327
altruism, 214, E154
androgens, 490
animal aggregation, 722
animal cycles, 283
animal model, E62
Anolis lizards, 683
aphid population dynamics, 113
Aphis nerii, 113
arms race, 598
Asclepias spp., 113
aspergillosis, S52
assembly rules, 255, 709
asymmetric dispersal, 582
asynchrony, 85
autocorrelated random walk, E130
autopolyploid, 101
- bacteria, S19
balancing selection, 696
Baldwin effect, 531
Bateman gradient, 444
Bateman's principle, 298
- Batesian mimicry, 598
Bayesian analysis, 396
begging, 13
behavioral ecology, 201
Bergmann's rule, E168
bet hedging, 25
biogeography, 244
biomass, 670
bird communities, 232
birds, 793
body size, E168
Braconidae, 423
brain mass, E20
breeding season, 531
breeding values, E115
brood development, 814
Brownian motion, 683
- cardenolides, 113
carotenoids, 51
caste conflict, E154
Central Arizona-Phoenix Long-Term Ecological Research project, 232
Chiroptera, E20
climate change, 378, 625
climatic oscillations, 283
coevolution, S6, S33
coexistence, 157, 232, 633
colonization, 378
color vision, 696
community ecology, 244, 709
community shifts, 255
community structure, 232, 244, 709
- comparative study, S90
compartmentation, 85
competition, 157, 473, 633, 736
competition models, 255
conflict, E73
conspecific reproductive success, 121
constraint, 38
convergence, 244
convergent evolution, 335
cooperation, 132
coral reefs, S52
corticosterone, 490
cost, E90
cryptic female choice, 457
curvature, 765
- damselflies, 559
Daphnia, S19
dark-eyed junco, 531
demographic noise, 543
demographic stochasticity, 793
dendrochronology, 283
density dependence, 298
desert rodents, 670
Desmognathus, 201
development, 415, 559
diet mixing, 423
diffusion, 214
disease, S79
disease impact, S52
disease resistance, S1
disease virulence, S1
dispersal, 244, 633

- distraction sneakers, E32
 distributed maturation periods, 543
 divergent natural selection, 335
 diversity, 1
 division of labor, 677
 Dobrushin's coefficient, E46
 dominance competition, 310

 echinoid, 298
 ecological conditions, 660
 ecological immunology, 559
 ecological interactions, 201
 ecological stoichiometry, 157
 ecomorphology, 335, 614
 ecosystem response, 625
 ectoparasites, 803
 ectotherms, E168
 emergent disease, S1
 Emydidae, 244
 enemy-free space, 423
 energetic constraint, 670
 energy use, 670
 entropy, E46, 677
 environmental deviation, E115
 environmental fluctuations, 350
 environmental stochasticity, E103, 793
 environmental stress, 736
 environmental variability, E1
 epidemics, S1
 epidemiology, S79
Erethizon dorsatum, 283
 ESS model, E90
 evolution, 101, 378, 415, 660, 696, 814, S33
 evolution of virulence, S19
 evolutionarily stable strategy, 473
 evolutionarily stable strategy (ESS), 598
 evolutionary branching, E73
 evolutionary model, 683
 exotic invasion, 350
 expensive tissue, E20
 extinction risk, 25

 fast start, 38
 Fisherian runaway, 173
 fishing, 567
 fitness, E62
 fitness costs, 660
 fitness sets, 765
 fleas, 506
 fledging mass, E115
 fossil, 431
 frequency-dependent selection, 765

 game-theoretic model, E32
 gene cassette, 1
 gene flow, 187
 genetic correlations, 13
 genetic polymorphism, 70
 genetic variance, 70
 geographic range, S90
 geometric morphometrics, 335

 giving-up density, 232
 Glanville fritillary butterfly, 364
 good genes, 173
 gorgonians, S52
 grasslands, 350
 gravity models, 267
 group size, 121

 habitat choice, 473
 habitat selection, E103
 handicap, 51
 harem size, E83
 hazard regression, 60
Helianthus, 145
 herbivory, 614
 heritability, E62, 660
 heterogeneous environments, 70
Hirundo rustica, 121
 historical contingency, 335
 horizontal gene transfer, 1
 host, S33
 host manipulation, 814
 host specificity, 506
 host-parasite, 814
 host-parasite interactions, S90
 host-pathogen, S1
 hourglass model, 415
 human evolution, 753
 hybridity, 803
 hybridization, 145

 ideal free distribution, 473
 immigration, 187
 immune activation, 651
 immunization, 51
 immunocompetence, 51, 490
 immunosuppression, 490
 inbreeding, 214
 inclusive fitness, 132
 independent contrasts, E20
 index of resource monopolization, 444
 individual-based model, 364
 individual-based spatially explicit simulations, E130
 infectious disease, S19
 infertility, 457
 information theory, 677
 integro-differential equations, 543
 integrin, 1
 interpatch connectivity, E130
 invasion fitness, 765
 isodar analysis, E103

 jackknife, 1

 kernels, 633
 kin selection, 214, E73, 753

 latitude, E168
 latitudinal gradients, E1
 length of the breeding season, 327

 life-history evolution, 38
 life-history trade-offs, 310
 life-history traits, 25, 559
 life-history variation, 793
 lifetime reproductive success, E62
 local adaptation, S6
 long-lived taxa, 431
 lottery assignment of helping roles, 132
Lynx pardinus, E130

 macroevolution, 614
 male reproductive success, E83
 mammals, 506
 marine epidemic, S52
 Markov chain, E46
 maternal energy investment, E20
 mathematical model, S64
 matrix, S64
 matrix fragmentation, E130
 maximum likelihood, 396
 measles, 267
 meta-analysis, S6
 metabolic rate, E20
 metacommunity, 310
 metagenome, 1
 metapopulation, 364
 microsatellites, 298, 444
 milkweed, 113
 model, E73
 modeling, 696
 Morisita index, 444
 morphology, 431, 803
 mtDNA, 396
 multihost, S64
 multiple ornaments, 173
 multiple paternity, 298
 mutualism, 132

 natal dispersal, 660
 natural population, 60
 natural selection, 145, 517, E115
 neighbor-modulated fitness, 753
 nest reuse, 121
 nested clade analysis, 396
 niche breadth, E1
 niche evolution, 187
 nonsperm representation, 457
 nonuniform steady state, 722
 North American porcupine, 283

 ontogeny, 415
 opportunity for selection, 736
 ornamental coloration, 651
 Ornstein-Uhlenbeck, 683
 Orthoptera, 378
 oxidative stress, 651

Pan troglodytes troglodytes, 567
 parasite, E90, S33
 parasites, S6
 parasitic castration, S19

- parentage, 444
 parental care, 13, 517
 parthenogenesis, 803
Parus major, E62, E115
Pasteuria, S19
 patchy population, 364
 pathogen, S64
 peregrine falcon, 582
 perforating, 567
 performance gradients, 13
 persistence, 431
 pharmacophagy, 423
 phase difference, 267
 phenology, 25
 phenotypic plasticity, 531
 phylogenetic distance, 709
 phylogenetics, 201
 phylogeny, 709
 phylogeography, 396
 physiological traits, 559
 physiology, 803
 plant life-history evolution, 736
 plant pathogen, S79
 plant senescence, 60
 plant water stress, 625
 plant-insect interactions, 113
Plantago lanceolata, 60
 plasma carotenoids, 651
Plodia-Venturia, generation cycles, 543
 policing, 753
Polistes wasps, 814
 polymorphism, 598
 polyploidy, 803
 population density, 517
 population differentiation, 335
 population extinction, 531
 population regulation, 582
 population size, 614
 population variability, E1
 predator-prey, 473
 preemptive competition, 310
 primary consumers, 614
 primate, 696
 primates, S90
 priority effects, 157
 probability of fixation, 214
 protandry, 25
 public-goods game, 753
 puncturing, 567
- quantitative traits, 70
- R_0 , S64
 rarity, 350
 recovery, E90
 Red Queen hypothesis, S6
- regime shift, 255
 reintroduction, 582
 relatedness, 132, 214
 replicator system, 473
 repression of competition, 753
 reproductive competition, E83
 reproductive timing, 25
 resilience, 255
 resource exploitation, E32
 resource limitation, 670
 resource ratio, 157
 reticulation, 85
- salamanders, 201
Sceloporus, E168
 schistosoma, S33
 sea fan corals, S52
 selection, 531
 selection differential, 736
 selection gradient, 736
 selection gradients, 13
 selective regime, 683
 sensitivity analysis, E46
 sequential hermaphroditism, 779
 sex allocation, 779
 sex change, 779
 sex ratio, E83
 sexual reproduction, S6
 sexual selection, 298, 444, 517, E83, 651, S90
 sexual signal, 51
 signal detection, 598
 simultaneous hermaphroditism, 779
 SIR model, 267
 site selection, 121
 size, 779
 snail, S33
 social insects, E154
 social parasites, 814
 social policing, E154
 social selection, 13
 sociality, 132
 soft selection, 70
 soil moisture, 625
 soil water balance, 625
 solar cycle, 283
 song sparrow, 490
 source-sink, 187, 582
 source-sink dynamics, 310
 southern Appalachians, 201
 spatial correlation, E103
 spatial heterogeneity, 310, 633
 spatial scale, 633
 spatial structure, 582
 specialization, E1
 speciation, 145
- species abundance, 709
 species boundaries, 396
 species diversity, E46
 species richness, E1, S90
 sperm competition, 457
 sperm limitation, 457
 sperm precedence, 457
 SPOMSIM, 364
 stage-structured models, 543
 standard of plausibility, E130
 stochastic patch occupancy model, 364
 stochastic population dynamics, 793
 stochastic processes, 625
 subsystems, 85
 swarming, 722
 swimming performance, 38
- Tachinidae, 423
 task specialization, 677
 taxis-diffusion partial differential equation, 722
 temperature, E168
 temporal variation, 187
 termite predation, 567
 territoriality, 327
 testosterone, 51, 327, 490
 Tettigoniidae, 378
 theory, 101
 time constraints, 559
 tool use, 567
 trade-off, E90
 trade-offs, 38, 157, 765
 transgressive segregation, 145
 transition matrix, E46
 transmission, S79
 triploid block, 101
 triploid bridge, 101
 tritrophic interactions, 423
 trophic structure, 614
 tropical birds, 327
 TSIR model, 267
- urban ecology, 232
- vertebrates, 415
 virus, S79
- wavelet, 267
 weak/strong energetic flows, 85
 who acquires infection from whom (WAIFW), S64
 worker reproduction, E154
- Xantusia*, 396
- zebra finch, 651